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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,917	10/02/2003	Kwong-Onn C. Chan	V2003012	9576

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12/29/2005

BRACEWELL & PATTERSON, L.L.P.

Attention: James E. Bradley

P. O. Box 61389

Houston, TX 77208-1389

EXAMINER

BATES, ZAKIYA W

ART UNIT

PAPER NUMBER

3676

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/677,917

Applicant(s)

CHAN ET AL.

Examiner

Zakiya W. Bates

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-15 and 19 is/are rejected.
- 7) ☒ Claim(s) 10, 16-18 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 19 and 20 are objected to because of the following informalities: claim 19, line 1, the term "an method" should be replaced with --a method--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-9, 11-15, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,935,423 or US 6,601,652.

US 6,935,423 discloses, with respect to independent claims 1 and 11, an apparatus for opening and closing a passage of a drill string, comprising: a concentric string of conduit for suspending a drill bit 32 and a motor 36, the concentric string of conduit defining an inner passage and an annular passage 86; an annular valve assembly 211 carried in the annular passage that is selectively actuated between open and closed positions for regulating fluid flow through the annular passage; and an inner

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valve assembly carried in the inner passage that is selectively actuated between open and closed positions for regulating fluid flow through the inner passage. With respect to the depending claims listed above, the reference teaches the limitations as claimed, including annular valve passage, spring 188, and piston 184. With respect to claim 19, the reference discloses a method for opening and closing a passage of a drill string suspending a drill bit and a motor, comprising: providing a concentric string of conduit having an inner passage and an annular passage, and an annular valve carried in the annular passage; opening the annular valve by supplying fluid pressure in the annular passage above the annular valve; and closing the annular valve by discontinuing the supply of fluid pressure in the annular passage above the annular valve.

US 6,601,652 discloses, with respect to independent claims 1 and 11, an apparatus for opening and closing a passage of a drill string, comprising: a concentric string of conduit 201 for suspending a drill bit 130 and a motor 122, the concentric string of conduit defining an inner passage and an annular passage 216A, 216F; an annular valve assembly 220 carried in the annular passage that is selectively actuated between open and closed positions for regulating fluid flow through the annular passage; and an inner valve assembly carried in the inner passage that is selectively actuated between open and closed positions for regulating fluid flow through the inner passage. With respect to the depending claims listed above, the reference teaches the limitations as claimed, including annular valve passage, spring, and piston 224. With respect to claim 19, the reference discloses a method for opening and closing a passage of a drill string suspending a drill bit and a motor, comprising: providing a concentric string of conduit

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having an inner passage and an annular passage, and an annular valve carried in the annular passage; opening the annular valve by supplying fluid pressure in the annular passage above the annular valve; and closing the annular valve by discontinuing the supply of fluid pressure in the annular passage above the annular valve.

4. Claims 1-9, 11-15, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,462,472 or US 3,970,335.

US 4,462,472 discloses, with respect to independent claims 1 and 11, an apparatus for opening and closing a passage of a drill string, comprising: a concentric string of conduit 13, 28 for suspending a drill bit A and a motor M, the concentric string of conduit defining an inner passage 31 and an annular passage; an annular valve assembly 33 carried in the annular passage that is selectively actuated between open and closed positions for regulating fluid flow through the annular passage; and an inner valve assembly 35, 36, 38 carried in the inner passage that is selectively actuated between open and closed positions for regulating fluid flow through the inner passage. With respect to the depending claims listed above, the reference teaches the limitations as claimed, including annular valve passage, spring 43, and piston 69. With respect to claim 19, the reference discloses a method for opening and closing a passage of a drill string suspending a drill bit and a motor, comprising: providing a concentric string of conduit having an inner passage and an annular passage, and an annular valve carried in the annular passage; opening the annular valve by supplying fluid pressure in the annular passage above the annular valve; and closing the annular valve by

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discontinuing the supply of fluid pressure in the annular passage above the annular valve.

US 3,970,335 discloses, with respect to independent claims 1 and 11, an apparatus for opening and closing a passage of a drill string, comprising: a concentric string of conduit P for suspending a drill bit B and a motor M, the concentric string of conduit defining an inner passage and an annular passage 153, 155, 177; an annular valve assembly 100 carried in the annular passage that is selectively actuated between open and closed positions for regulating fluid flow through the annular passage; and an inner valve assembly 102, 190 carried in the inner passage that is selectively actuated between open and closed positions for regulating fluid flow through the inner passage. With respect to the depending claims listed above, the reference teaches the limitations as claimed, including annular valve passage, spring 175, and piston 120. With respect to claim 19, the reference discloses a method for opening and closing a passage of a drill string suspending a drill bit and a motor, comprising: providing a concentric string of conduit having an inner passage and an annular passage, and an annular valve carried in the annular passage; opening the annular valve by supplying fluid pressure in the annular passage above the annular valve; and closing the annular valve by discontinuing the supply of fluid pressure in the annular passage above the annular valve.

***Allowable Subject Matter***

5. Claims 10, 16-18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***


6. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zakiya W. Bates (formerly Zakiya Walker) whose telephone number is (571) 272-7039. The examiner can normally be reached on Monday-Friday, 8:30 AM-5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Zakiya W. Bates  
Primary Examiner  
Art Unit 3676

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December 22, 2005